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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,924	01/12/2001	Daryl Carvis Cromer	RPS920000055US1	2774

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EXAMINER
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LONG, HEATHER R

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/759,924

Applicant(s)

CROMER ET AL.

Examiner

Heather R. Long

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 8, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Wickes (U.S. Patent 6,826,315).

Regarding claim 1, Wickes discloses a method in a digital camera for verifying that a particular digital visual image was produced by the digital camera, the method comprising the steps of: storing a visual image in a digital format in the camera; generating a digital signature data for the image utilizing the camera only in response to the storage of the image in the camera, the digital signature data associating the stored image with the camera (col. 1, lines 46-56; col. 2, lines 14-16); storing the digital signature only in the camera (col. 2, lines 26-33), the signature being stored separately from the image in the camera (col. 2, lines

16-36; Fig. 2), the digital signature capable of being utilized only within the camera by only the camera, wherein the signature is inaccessible to the devices other than the camera (col. 4, lines 13-20); and subsequently authenticating the particular digital visual image as being produced by the digital camera utilizing the digital signature stored in the digital camera, wherein only the digital camera is capable of authenticating the particular digital visual image (col. 4, lines 13-31).

Regarding claim 2, Wickes discloses all the subject matter as previously discussed with respect to claim 1 including that the method further comprises the steps of: storing the visual image in a file within the camera, the file being designated by a filename; and storing the signature in the camera with the filename (memories (22) and (24); col. 14, line 65 – col. 15, line 8). It is inherent that the files would be designated by a filename in order to retrieve the file again.

Regarding claims 8 and 9, these are apparatus claims corresponding to the method claims 1 and 2. Therefore, claims 8 and 9 are analyzed and rejected as previously discussed with respect to claims 1 and 2.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2615

5. Claims 3-7 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wickes as applied to claims 1 and 8 above, and further in view of Safai (U.S. Patent 6,577,336).

Regarding claim 3, Wickes discloses all the limitations as previously discussed with respect to claim 1, but fails to disclose that the method further comprises the steps of: establishing a hardware master key pair for the digital camera, the hardware master key pair including a master private key and a master public key, the hardware master key pair being associated with the digital camera so that the master private key is known to only the digital camera; establishing a signature device having an encryption engine and a protected storage device, the protected storage device being accessible only through the encryption engine; and storing the hardware master key pair in the protected storage device.

Referring to the Safai reference, Safai discloses a method in a digital camera for verifying that a particular digital image visual image was produced by the digital image, wherein the method further comprises the steps of: establishing a hardware master key pair for the digital camera, the hardware master key pair including a master private key and a master public key, the hardware master key pair being associated with the digital camera so that the master private key is known to only the digital camera (Figs. 10A and 10B; col. 14, lines 32-61); establishing a signature device having an encryption engine (Step 1020) and a protected storage device (secure key), the protected storage device being

accessible only through the encryption engine (Fig. 10A); and storing the hardware master key pair in the protected storage device (col. 14, line 65 – col. 15, line 8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teaching of using master private and public keys as taught by Safai to keep the digital signature data secure in the Wickes reference.

Regarding claim 4, Wickes in view of Safai discloses all the subject matter as previously discussed with respect to claims 1 and 3 as well as Safai further discloses that the method wherein the step of generating a digital signature further comprises the steps of: hashing the stored image to produce an original image digest; signing the first digest utilizing the master private key; and storing the signed original image digest as the signature (Fig. 10 A; col. 14, lines 32-47).

Regarding claim 5, Wickes in view of Safai discloses all the subject matter as previously discussed with respect to claims 1, 3 and 4 as well as Safai further disclosing that the step of authenticating the visual image further comprises the steps of: retrieving an image to authenticate (step 1050); retrieving a signature for the image which is to be authenticated (step 1050); hashing the image which is to be authenticated to produce a first digest (step 1060); decrypting the retrieved signature to retrieve a second digest (step 1055); comparing the first digest to the second digest (step 1065); determining that the image has been altered in response to a determination that the first and second digests do not

match (Step 1070); and determining that the image has not been altered in response to a determination that the first and second digests match (Step 1070) (Fig. 10B; col. 14, lines 47-61).

Regarding claim 6, Wickes discloses all the limitations as previously discussed with respect to claim 1, but fails to disclose that the step of generating a digital signature further comprises the steps of: hashing the stored image to produce an original image digest; signing the first digest utilizing a master private key; and storing the signed original image digest as the signature.

Referring to the Safai reference, Safai discloses all the subject matter as previously discussed with respect to claim 1 including that the step of generating a digital signature further comprises the steps of: hashing the stored image to produce an original image digest (step 1020); signing the first digest utilizing a master private key (secure key); and storing the signed original image digest as the signature (Fig. 10A; col. 14, lines 32-47).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have generated the digital signature data by hashing the digital image as taught by Safai instead of using the checksum algorithm as taught by Wickes because both techniques may be used when authenticating an image.

Regarding claim 7, Wickes in view of Safai discloses all the subject matter as previously discussed with respect to claims 1 and 6 as well as Safai further disclosing that the step of authenticating the visual image further comprises the

steps of: retrieving an image to authenticate (step 1050); retrieving a signature for the image which is to be authenticated (step 1050); hashing the image which is to be authenticated to produce a first digest (step 1060); decrypting the retrieved signature to retrieve a second digest (step 1055); comparing the first digest to the second digest (step 1065); determining that the image has been altered in response to a determination that the first and second digests do not match (Step 1070); and determining that the image has not been altered in response to a determination that the first and second digests match (Step 1070) (Fig. 10B; col. 14, lines 47-61).

Regarding claims **10-14**, these are apparatus claims corresponding to the method claims 3-7. Therefore, claims 10-14 are analyzed and rejected as previously discussed with respect to claims 3-7.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the



Art Unit: 2615

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather R. Long whose telephone number is 571-272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on 571-272-7593. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Heather R Long  
Examiner  
Art Unit 2615

HRL  
June 27, 2005

  
DAVID L. OMETZ  
PRIMARY EXAMINER